## **REMARKS**

The Examiner has objected to the prior amendment as filed on October 31, 2001 for not complying with the requirements of 37 CFR 1.121(c) because the amendments to the claims are not clear since the claims are all underlined but not all amended and it is unclear where any amendments have actually been made.

As discussed with the Examiner in a phone interview on August 6, 2003 the amendment filed on October 31, 2001 was a preliminary amendment submitted along with a petition under 37 CFR 1.53(c)(3) to convert the provisional application filed on July 10, 2001 to a non-provisional application. The preliminary amendment added claims to the application as well as made amendments to portions of the specification. Therefore all of the claims included in the preliminary amendment filed on October 31, 2001 were newly entered claims and were parenthetically marked as new. According to the rules under 37 CFR 1.121, that were in affect at the time, a clean copy of claims 1-52 and a marked up copy (all underlined) were included with the amendment. Claims 45 and 48 were inadvertently left without underlining in the marked up copy that were attached to the back of the amendment. Applicants have however included a set of claims 1-52 marked as "new" for consideration with this response. Applicants therefore respectfully request reconsideration of claims 1-52 and withdrawal of the objection thereto.

Additionally, the Examiner has requested that support for the amendments to the specification needs to be provided.

Applicant has amended the specification by adding two paragraphs to the specification under the heading "Summary of the Invention". The first paragraph is a paraphrase of independent claim 1 and the second paragraph is a paraphrase of independent claim 14. Paragraph 12 of the original specification filed on July 10, 2001 contained a typographical error in line twelve thereof that was deleted. The first line of paragraph 18 was amended by adding "As shown in Fig. 2 the previous system taught in U.S. Patent 5,058,440". Thus, clarifying that a portion of Fig.2 showed material presented in U.S. 5,058,440 was from a previous system as was set forth in the background of the specification. The amendments to paragraph 21 corrected an improper element call out in line 2 and a

typographical error in line 10. The remaining amendments to paragraph 21 were to correct that the electrical circuit shown in Fig. 4 is an analog refining circuit and not an analog to digital converting circuit. No new matter has been added by this amendment as it is apparent from an inspection of Fig. 4 to those skilled in the art that this is an analog refining circuit and not an analog to digital converting circuit. Paragraph 23 was amended by deleting the description of a portion of Fig. 2 that was set forth in the previous system as set forth in U.S. Patent 5,058,440. Paragraph 24 of the specification was amended to remove the description of the portion of Fig. 2 that is set forth in U.S. Patent 5,058,440 and to accurately describe the function of the processor 84. That is, the processor 84 controls the total air flow rate to the partial flow dilution tunnel 38 that is capable of re-acting to transient engine conditions while substantially eliminating particle deposition and entrainment. Most of the amendments to paragraph 25 are in the form of deletions and therefore contend that no new matter has been added. Lastly, paragraph 25 was amended to more appropriately set for the description of the circuit in Fig. 4 is and analog refining circuit and not an analog to digital converting circuit as explained above.

It is respectfully urged that the subject application is in condition for allowance and allowance of the application at issue is respectfully requested.

Respectfully submitted,

A. Greene

Registration No. 45,756

Patent Agent Caterpillar Inc.

Telephone: (309) 675-1056 Facsimile: (309) 675-1236

G:/JAG/Amend/00-714-1.doc